

CHAMBERS'S JOURNAL OF POPULAR LITERATURE

Science and Arts.

CONDUCTED BY WILLIAM AND ROBERT CHAMBERS.

No. 420.

SATURDAY, JANUARY 18, 1862.

PRICE 14d.

WE GIRLS IN THOSE OMNIBUSES.

'CHARING CROSS, Fleet Street, Westminster, fourpence all the way!' So sings that never-sitting bird, the conductor of the 'Favourite' omnibus. Here we stand, three scared country ladies, outside that unangelic spot, the 'Angel,' Islington. Won by the blandishments of the 'Favourite,' we carefully adjust our skirts, hitherto so innocent of London mud, and daintily step into the middle of the road, wondering why the omnibus does not drive quite close up to the pavement for us. First sister—in, with a mighty effort; second sister, with a gasp at the height of the step, follows. 'Now, then, ma'm—right!' and off we go, the last sister's last foot in a state of suspense between London mud and a London omnibus. Fear soon decides the question; clutching wildly at a greasy hand from the interior, and aided by a propelling force from without in the shape of a conducting arm, No. 3 is in, only, however, to augment the awful consternation her sisters are experiencing, arising from the unsolved riddle—'Where are we to sit?' No. 1 is dignified, No. 2 is plaintive, No. 3 is nervous. 'He said there was room,' murmurs No. 2, in accents vague. 'Here's room for one,' says a stout, rosy-faced woman, indicating, with her thumb, an imaginary space between herself and a cadaverous-looking shadow of a man, whose legs are rendered invisible by the mud-fringed drapery of his facetious neighbour.

At last all are seated, No. 3 having been startled into an unnaturally small compass by a remark from the owner of the greasy hand at the door, who says: 'If there ain't room, anyhow, there's my knee at your service, miss.'

Our journey is a long one; really, we shall get our money-worth. One by one the passengers are 'put down,' and others 'taken in;' but by this time, having all the right and dignity of precedence, we have so far regained our composure as to admire the internal economy and decorations of the 'Favourite.' First of all, there is that mysterious brass bar down the centre, reminding us of a lightning-conductor. What is its purport? We soon discover, to our cost. Plaintive No. 2 is suffering severely from compression, and though the half of the side to which she does not belong is only occupied by two small children, and something that looks like the thin moiety of an ordinarily sized woman, yet she cannot encroach upon

their rights, for that brass bar—oh, it must have a heart of iron!—is their firm friend; it 'stands up' for them, towers far above her small agonies, and insists upon her keeping her proper place, limited and previously occupied though that place may be; for she is seated between a portly lady and a more portly gentleman; and well is it for her that in this respect she cannot compete with her neighbours, for, otherwise, what *would* become of her? And this brings to mind another omnibus enigma. Why, we pathetically ask, why is it that the three stout people invariably found in an omnibus invariably sit in the same compartment, and as invariably turn upon each other those bitter looks of mingled suffocation and hatred? Must like *always* seek like?

Alack-a-day! the muddy drops yclept rain by the Londoners are falling fast; our omnibus becomes popular and populous; and we soon find we suffer as severely from the shower as if we were outside. In vain we embrace our crinolines, our pet new expanders—in vain endeavour to delude ourselves and others into the belief that we have no legs; each passer-by leaves a token of remembrance in the shape of adhesive London mud on our Magenta petticoats, and their unhappy-looking umbrellas revenge themselves for the wetting they have just received, by shedding dirty, spiteful tears on our boots. *Our boots!* Now, if we have a weakness, it is for neat boots, and we *never* allow them to be trifled with in any way whatever.

We are full (twelve inside); wherefore, then, does that resolute-looking woman in black stand on the step, as if with a determination to ignore the existence of somebody, and find room? We should not like to contradict that woman; we should not like to say we are in this omnibus, if she chooses to assert that we are not. She is not pretty. At some 'long time ago' her mouth evidently took up too much room, and she, of too orderly and economical a turn of mind to stand this, had tried to pucker it up into a smaller compass. The struggle seems to have been severe, for its traces still remain in the shape of long seams radiating from the centre of suffering, reminding us of the entrance of a pudding-bag when the pudding is yet inside. There she is, standing on the step, peering at us with her avaricious eyes, while over her shoulder our untiring bird sings again: 'Will that young gentleman in the corner get outside to oblige a lady?' *Almost* personal this; but 'that young

gentleman' looks straight before him, under pretence of believing that the conductor is speaking to some one else. 'Will any gentleman get outside to oblige a lady?' We don't know what he can mean, it is so unlikely in this pouring rain. Perhaps he is asking that funny question to make us laugh. Ought we to laugh? May we laugh? We look around to see what every one else is doing; all are grave. Are they humouring this joke? But no; that man in the brown alpaca coat is speaking, and half-a-dozen female voices chorus: 'This gentleman will ride outside.'

Conductor, blandly—'Will you be pleased to come out, sir?'

Alpaca coat, firmly—'No, I won't. I only said I should get out at Charing Cross, and that then she could have my place.'

So on we drive, our friend just standing inside, grasping the door with an iron grasp. The end of her shawl is in poor No. 3's left eye; her elbow is in No. 3's mouth, who is thereby precluded from making any objection, even could she have found courage to do so. No. 1 is not behaving at all well, her mouth being most untidily open; No. 2 is afraid that this strange journey has given No. 1 a fit, never having seen her with such an aspect before. Her gaze is riveted on certain many-coloured poles gleaming through the glass ventilators. She ventures to make a timid inquiry of her left-hand neighbour, not being sure that it is quite safe; he looks disdainfully at her, and shouts: 'Thems the legs of the gents as rides outside.'

Stoppage, 'Charing Cross.' He of the alpaca coat gets out, and the woman in black fiercely pounces on his seat. No more adventures until Westminster, where we get out, and No. 1 presents the conductor with a shilling, which he puts into his mouth. Does silver assist the conductive digestion? Gravel is said to agree with hens. Perhaps, though, he has a pouch within his cheek. Has nature, as a small compensation for many disadvantages, provided him with such a ready-made purse?

Now, we honestly confess, indeed we have never endeavoured to conceal the fact, that we are only country people; and now that we are once more at home, this mighty London, this great metropolis, seems to us a greater wonder, a mightier mystery than before; and within us arises a restless, ceaseless longing—a wild wish to know somewhat more of the natural history of conductors. Do conductors ever sit down? Can conductors sit down? Did they grow up standing, and so find their places just fitted to them? Did their mothers all know they were going to be conductors, and regulate their conduct accordingly? For surely peculiar circumstances and treatment alone could produce the eccentricities we call conductors.

Once, among a crowd of omnibuses, we saw upon one a stout conductor. Yes, dreamlike, fantastic though it may appear, such was the fact. Though we looked daily for the same phenomenon, it was never repeated; and we have come to the conclusion that the vision was unreal—'Beauty' momentarily 'embodied to our sight,' to shew to what conductors *may* come. A stout conductor! O strange anomaly! Rather let us tell of the conductor who died of indigestion, arising from bolting his food, gathered piecemeal during his brief stoppages. Rather let us tell of the conductor whose only recreation was crawling on all-fours over the roof of his lively charge, and who was degraded to a twopenny omnibus for being guilty of this dissipation twice in one day, thus turning a deaf ear to the pathetic entreaties of an old lady inside, who nearly died of asthma and fright at having gone ten yards beyond her destination, and who would certainly have perished then and there, but for the gallant efforts of a volunteer, who, after three bonneting and piercing himself with his 'side-arms,' in the effort to get out and stand where none but a conductor can stand, succeeded in attracting the absentee's notice.

Have conductors any homes? Had they ever time to marry? Do old mothers sit by their firesides? Do they kiss baby-faces before they go to their short sleep? We almost think so, for we have seen them deal very lovingly with little children; and wherefore else is it that one stops a dozen times in half-an-hour to answer an old woman's querulous inquiry as to 'Ha we come to Piccadilly Circus yet?' Whence comes their stern patience? Why is their authority so unquestioned? 'Breathes there the man' so wildly pig-headed as to contradict a conductor? We should like to see that man. But stop! We remember—yes, indeed, we do remember a woman once raising her voice against the prevailing vice of saying 'Right,' and moving on whilst the passenger is yet on the step, instead of the seat, and calling the conductor 'a naughty boy' for so doing; insisting, moreover, on the vehicle's stopping until she and her dog were comfortably inside; but then she was French, and he evidently yielded in contemptuous pity for her continental ignorance.

Fellow-countrywomen, have you ever been in an omnibus at night? We were once, and No. 1 immediately found her company unpleasant. Bounded on one side by the brass rod, on her other sat a man who had taken seven or eight drops too much, though he was old enough to have known better. The worst of it was, he was not at all ashamed of himself; and as soon as his new neighbour approached, addressed her with: 'So you ha' come to sit agin me. Well, I ar glad. Doant 'ee stir, doant 'ee stir; plenty o' room. I can sit up 'into my old 'ooman 'ere.' We had not before been aware that there was in the omnibus a more unhappy person than were our three selves. Performing his promise, he facetiously addressed the suffering lady: 'Now, old Beg-o'-bones, I ain't a hundred mile off, ar I?' Now, what were we to do? True, there was our escort; but he was three seats off, asleep, as we thought; but, as he afterwards assured us, merely 'shutting his eyes to keep them warm.' Every one says 'Patience is a virtue;' but was it our duty to suffer indignities? We had almost decided not, when our tribulations were brought to a sudden end by the determination of the old sinner to perform the remainder of his journey on foot. So out he got; the poor 'Beg-o'-bones' followed, looking, we thought, as if, besides the aforesaid bones, she had to drag along a very heavy heart.

It was the memory of this man that made a winking individual, likewise encountered in an omnibus, so utterly obnoxious to us. No. 1 still thinks that he was insane, and No. 2 that he suffered from a nervous affection of the eye, but No. 3 laboured under the painful conviction that this habit was assumed, and was, in fact, a personal attention to herself. So hateful was the bare idea, that it awoke all the courage which had been dormant ever since our arrival in London, and, exerting three indignant voices, we *desired* the conductor to put us down, instead of making this request a favour, as we had been in the habit of doing. Behold us, therefore, stranded on a London pavement; of our whereabouts, we have not the wildest idea. We left Regent Circus with the intention of visiting a friend in Paddington, but we do not in the least know to which we are nearer—our starting-place or our destination—and we feel very, very forlorn, until No. 1 exclaims: 'Why not wait for another omnibus?' Her suggestion is received with unbounded applause, and we wait.

Now, everywhere but in London, waiting gives the idea of quietude; but here, with our waiting, commenced a series of small persecutions, endured by us with politeness, too evidently, alas! born of cowardice. Here is our principal trouble, in the shape of this perambulating photographer with the iron-mouldy beard, Magenta nose, and tie to match, whose everlasting cry is: 'Portrait taken! Only sixpence: frame and picture complete for sixpence.' He is unrelenting.

in his attentions, is certain that these 'three sweet sisters' would make a fine picture, or if we should prefer being taken singly, he 'can do them small enough to go in a gent's pin, and he is sure there is some as would like to have 'em.' Now, we detest crossings—even at this distance of time and space we cannot think them safe—but the terror of this man behind us drives us wildly forward, and it is not until we are in the middle of the street that we realise the perils of our position, and here we all three stop short. Can that cabman be addressing No. 2? He says: 'Now, then, stoopid.' Well, she does not look witty; she is staring at the cab-horses, as if wondering which of them will be her fate, but still we do not think he need have made that remark. Now she has vanished from our sides; she has run all the way back, and the photographer is conversing with her again. Oh! it is so unladylike to run in the streets, but here she is, back again at the same pace; and now, both she and No. 1, who seems likewise to have left her native dignity at home, are safely on the other side. Poor little No. 3 is stopping to assure a crossing-sweeper that she has only half a sovereign with her; he is importunate; so she asks his name and address. We are grieved to say he does not appear gratified; on the contrary, seems rather to resent her kindly meant inquiries, and we are sorry to state, but truth compels it, that she finished her race by retreating both swiftly and ignominiously before a wheelbarrow.

Oh, what *shall* we do? we are so wretched. What that little boy says about 'omnibus-straw hanging to our tails' may be true, but politeness might have kept him silent; and he need not come so very close to us, nor make so many remarks about our 'whoops.'

O joy! An omnibus is passing, with the magic word 'Paddington' inscribed on its panels; so, much to the loudly expressed amusement of our friend the little boy, we make frantic signals to the conductor, who waits until No. 1 gets in to tell us that there is only room for two, unless one will 'ride outside.' Out we flutter again, not sure whether we ought to pay or not, and rather feeling as if we should beg the conductor's pardon for detaining him; but he looks benign; so we are reassured. But oh, we do object to going back to that little boy. Never mind; here is another Paddington omnibus, and nearly empty. Overjoyed, we hasten to deposit ourselves therein, and on giving a last look at our little tormentor, we behold him on the pavement in a fresh fit of laughter, evidently at our expense; and why, we soon discover to our cost: we are not going to, but from Paddington. We all prepare a long scolding for the conductor, but have not courage to deliver it when he opens the door and says 'Regent Circus' with such an air of calm superiority. So we pretend that we always meant to go to Regent Circus, and submissively take the 'Favourite' to the Guardian Spirit of Islington, who, by the way, must indeed have been in great straits before she put up with such a one.

Now, we are very much afraid that we have talked too much, but verily, there are few things that we like better than the sound of our own voices, on this subject especially. We have wearied our private friends with it, and now take a turn at our public ones, and still we are not at all tired. Does any one wish to hear us say anything more 'concerning' our London experiences? We are quite ready to oblige them. Or will any one discourse to us about omnibuses? There are many things we want to know. Does every omnibus keep a flying-man? We mean one of those individuals who, on seeing an omnibus pass, is suddenly seized with a fit of running, fiercely pursues, overtakes, and boards his prey, the speed of the horses not being for one instant checked. And the everlasting fat man—is he chronic? And the woman with the basket. A basket in conjunction with an omnibus has been an object of horror

to us, ever since we heard that little story about Greenacre; and we do wish some strong-minded person would say aloud every time he encountered one of these wicker-work travellers: 'Greenacre went for miles in an omnibus, carrying with him his wife's head, neatly packed in a hamper.'

Oh, this great omnibus abuse! But stop. Is it altogether an abuse? Mr Helps says that, in his opinion, one of the statesmen of the day would be a more successful politician were he to travel regularly in these vehicles, and so make himself acquainted with a class of fellow-creatures with whom he could not otherwise come in contact. And we feel in duty bound to acknowledge that we have found omnibuses very convenient, and we have both met with, and heard of, much kindness given and received in them. A conductor once lent a dear friend of ours sixpence to pay her fare; it has never been returned, for that conductor has been vainly, though constantly, sought. Where is he now? We wish he knew how much his generosity has softened our hearts towards his brethren.

No. 1 once came to great grief in an omnibus, her hair taking an uncomfortable freak of visiting her waist; and she was really touched by a respectably dressed woman drawing a long hair-pin from her own head, and offering it with: 'If you don't mind using it, miss.' This woman had a baby in her arms. By the way, how very popular babies are in omnibuses; every one seems to look upon them as common property, and we have already said what marked attention is paid to these little tyrants by those otherwise unbending democrats, conductors.

Well, if we stand talking here any longer, we shall be told to 'move on with our great lumbering box-of-all-sorts,' as quoth a cabman to an omnibus-driver, and we would much rather go before it comes to that; so let us end. Our visit to London is among the things that were. When next we go there, we shall doubtless find many changes in our old enemies, for we hear rumours of their having interior spiral staircases to enable ladies to 'ride' outside, and of first and second class seats. But, be they ever so magnificent, no future vehicles shall make us forget those omnibuses of 1860.

EARTH-OIL IN AMERICA.

PETROLEUM, or earth-oil, has been long known to exist in different parts of the world, under the various names and shapes of Barbadoes tar, Rangoon petroleum, Cuba chapapote, and Trinidad asphaltum, which last seems to be merely petroleum of the thicker kind, hardened by exposure to the sun and air, and in many other conditions of density varying with location. From the compact asphaltum of Trinidad to the light and volatile earth-oils, there appears a line of close relationship running through the tarry and viscid mineral pitch and the dense semi-fluid petroleum.

At Gaspé, Canada East, the petroleum oozes out of a sandstone cliff, and in calm weather, spreads itself over a large portion of the sea. In the fissures of this sandstone cliff, where the petroleum has been prevented from reaching the ocean, it appears hardened, like the pitch of Cuba, having parted with its lighter portions by evaporation. The petroleum, however, of which it is proposed to speak more particularly is that of the American oil-region, a district from which, within the past two years, large quantities have been procured, and from which there is a probability of a supply being derived for years to come, which will materially modify or change the business of people engaged in providing that prime necessity of civilised life—a safe and economical light.

The line of country along which, within a range of one to two hundred miles on each side, the earth-oil is obtained in America, can be best observed by

placing a straight-edge or ruler on the map of North America, with one end at Gaspé Bay, Canada East, and the other at Houston, Texas. A line drawn the full length of the distance between these points will pass through the country drained by tributaries of the great rivers west of the Alleghany range, which consists of hills under various names, extending from the low lands of the Mississippi outlet through Alabama, Georgia, Kentucky, Tennessee, Virginia, Ohio, Pennsylvania, New York, Vermont, New Hampshire, the province of New Brunswick, and terminating in the rugged cliffs of Ship Head, Gaspé.

The country on this line between Gaspé and the state of New York is as yet wild and poorly cultivated, with the exception of the valley of the St Lawrence, and has not yet been explored for petroleum. When, however, we reach Seneca in Seneca County, New York, we find petroleum under the name of Seneca oil, obtained with the water of the salt-wells of that part of the state. This was probably the first petroleum obtained by white men in America. In Pennsylvania, there are indications which shew that the Indians long ago used it as a medicine, probably like the Barbadoes tar or British oil of the apothecaries' shops, for rheumatic affections. Seneca oil is still celebrated as a remedy for stiff joints and aching limbs. It was not, however, until the discovery of the mode of extracting a marketable burning oil from coal, and the difficulties and expense of obtaining such had been fully understood, that those persons engaged in its manufacture in the western coal-fields began to consider the practicability of obtaining an oil already distilled, and of much better quality, directly from the earth. In 1859, Pennsylvania, which contains a portion of the Alleghany coal-field, upon which numerous works for distilling crude oil from the cannel-coals and shales were located, was the scene of the first operations of the 'oil-borers,' as they were called. Their attention was attracted to the earth-oil as a means of supplying their wants, by observing that when the small 'runs' or water-courses were dammed, or when the water had collected in stagnant pools in midsummer, an oily scum floated upon its surface, and could be seen oozing from the bed and sides of the stream. In some places, the petroleum escaped, accompanied by large quantities of carburetted hydrogen gas, which bubbled up in the pools, and often gave them the appearance of being boiling caldrons. These water-courses were followed up; and the places where the escape of gas was greatest were marked as the best for 'boring,' for the idea of those who were engaged in these explorations was to tap the source of the petroleum by means of artesian wells, and by the same appliances which are used for sinking those wells. 'Boring for oil' was by no means so difficult a matter as manufacturing the fine oils from coal—a process requiring great experience and chemical knowledge; and therefore the number of wells which were begun by the speculators in petroleum stood in no danger of failing for want of skill. The first attempt was so successful as to lead numbers of people to plunge into the oil-business with great ardour.

The farmers, reflecting that there was no probability of any one getting the petroleum without first boring through the soil, claimed a large share in the prospective profits of the wells, and in some instances demanded and received, as their portion of the proceeds, as much as one-half of the oil obtained, and a round sum besides in yearly rental. Lots were staked off like mining claims in Australia. Wells of four inches diameter were sunk within a few feet of each other, and many disputes arose between the well-owners, as each would declare that the other was tapping his own peculiar oil-vat below. The 'oil-fever' increased with the number of wells, and in a few months the counties of Chenaago, Crawford, and

Warren became as lively a spectacle of speculation, enterprise, and busy industry as could well be imagined. The price of the earth-oil, when it was first obtained, was from forty to forty-five cents per American gallon, which is one-fifth less than the imperial gallon; but the owners of the soil tried very hard to raise the price to seventy cents, and succeeded so far as to increase the speculative feeling. In 1859, the wells yielded not less than two millions of gallons, and their number constantly increased. The proprietors of the large coal districts endeavoured to underrate the yield of petroleum; and went so far as to say that the wells would soon be dry, pointing to several which had begun to fail, as a proof of their assertion; but by the summer of 1860, the oil-wells took a fresh start, some enterprising borer, going deeper than his neighbours, having struck that great desideratum of the well-owner, a 'flowing well,' one in which the oil is forced up by the pressure of the gas below, and for a considerable time yields its oil free from water, without the assistance of a pump, as in the 'pumping-well,' where water to the extent of fifty per cent. is brought up with the oil. This flowing well gave a new impetus to the business, and if speculation in petroleum lands and privileges had been wild before, it was now stark mad. To strike the deep fissures of the rock below was now the aim of all. Many of the pumping-wells which were hardly paying, were sunk deeper, and often repaid their owners' outlay by pouring out petroleum at the enormous rate of sixteen thousand gallons per day—the hitherto pent-up gas below forcing it out, for days and weeks together, so rapidly, that in many cases it was lost for want of vats or casks at hand in which to store it. The land-owners became still more exacting in their demands, and many stories are told of the effect of the sudden wealth which poured into the oil-region upon persons unaccustomed to handle large sums of ready money; for although the American farmer may possess the means of a comfortable subsistence, yet, in the interior, cash is generally rare with him.

An instance of the effect of the prospect of sudden wealth upon a farmer's daughter is told with great uncton by the oil-men. The father of the girl lived in a poor cabin by the side of Oil Creek, and because he was not so prosperous as his neighbours, was not considered as of the best rank in country society. An oil-well had been sunk on the opposite side of the creek, and had proved to be most successful, and had induced a speculator to offer the farmer a large sum of money and a large share of the oil for the privilege of boring on his land. The bargain was made, and the work in progress. The daughter and her sister had not been well treated by the country swains, when they happened to meet at singing-school or meeting-house, and the prospect of being as rich as their neighbours was, of course, most agreeable to them. After the well had been begun, one young fellow who seems to have had an eye to business, became more attentive to our heroine, and after 'meeting' was over, would offer his arm, or tender some other polite attention. These little evidences of interest were graciously received by the hitherto neglected girl; and the people of the place at once set the pair down as 'keepin' company'—the American for 'engaged.' One Sunday morning as she came out of the meeting-house door, the young man stepped forward, as usual, to offer his attentions, but, drawing herself up with the most scornful air in the world, she cut him dead with the words: 'No, sir-ree; dad has struck ile!' Which was the fact. Dad, as she termed her father, had struck oil the night before, and she was now the daughter of a first-class oil-millionaire, and could mate only with one of her own set.

With the influx of people engaged in the petroleum business, came the means of supplying their various

wante, and towns and villages soon rose along the principal streams in the oil-region. The labours of the oil-well borers were now directed by experience, and many of them became very expert in their pursuit, and were able to explore the adjoining states with practised eyes. The salt-wells of the Great Kanawha River, in Virginia, had always yielded a small quantity of petroleum with the brine, and the country lying between that river and Oil Creek in Pennsylvania, and on the line of which mention has been made, in a short time was explored with good results. On the Little Kanawha and its tributaries, numerous very fruitful wells have been discovered; one of them, the Running Spring, quite eclipsing the best of those of Pennsylvania. In Ohio also some very good petroleum wells have been opened. Southward, the petroleum is found in Kentucky, in various conditions; on the Big Sandy River in that state, it has exuded from the face of a sandstone cliff, and formed a deep layer of pitch along the banks of the stream. Petroleum has also been found at various places in Tennessee, Georgia, and Alabama, and at the Sour Lake, not far from Liberty, in Texas, it has been discovered in the shape of a thick pitch, not unlike that of Cuba.

The petroleum of the Southern States is not yet fully developed, but there is little doubt that they will yet supply the earth-oil in abundance. If peace should again be established between the Northern and Southern States, and the northern speculators be permitted to reside in the south unmolested, no doubt they will endeavour to develop the oil-wells to as great a degree as those of Pennsylvania and Western Virginia.

The earth-oils, as at present procured, vary in specific gravity from 795° to 833°, at a temperature of 60° Fahrenheit; the average gravity being about 830°. The Ohio wells yield a heavier oil; in some cases, like that of Canada West, it is quite tar-like in consistence. The number of oil-wells at present in active operation in America is over one thousand, and the extent to which they will supply the oil for the present year will not be much short of ten millions of American gallons. It is exported largely to Europe from the Atlantic ports of the Northern States; and, besides, is largely consumed in the States generally. One thousand dollars is the average cost of the labour and plant required for an ordinary well of 100 feet or so in depth. The petroleum is delivered at the seaport at a price varying from twenty to twenty-two cents per American gallon. From these facts will be seen the importance of a business which, but a few years ago, was wholly neglected.

Regarding the origin of these earth-oils, there have been many theories. One writer states, that at a period when the earth was in a highly heated condition, asphaltum was volatilised and suspended over the earth in the form of a vast cloud; and that when the earth began to cool, the lighter portion of the asphaltum began to condense in the colder latitudes, and descended upon the disturbed strata of the Alleghany coal-fields and the oil-producing states; and that the hard asphaltum of Trinidad is nothing more than the residuum which might be expected after distillation on so grand a scale. Another states, that the great reservoirs of petroleum are the work of the coral insect, and that the earth-oil occurs in rocks far below the coal formation. Another believes the petroleum to be the bitumen of the anthracite coal, which has been extracted from it by heat on the east side of the Alleghanies, and ejected on the west side of those hills. Others suppose that petroleum is merely the gases from the deep coal-beds, which may be subjected to a low heat, condensed upon coming in contact with water which fills the fissures of the strata in the coal-fields; and that the gas which escapes so violently when the reservoirs are tapped, is merely the free gas which occurs when

coal is distilled in retorts, and which is only condensed by artificial means. There is a very strong resemblance between petroleum and the crude oil distilled from coal; but similarity of origin ought to have produced oils precisely similar, which it must be admitted they are not. As it is, there is a wide field for the conjectures of both the scientific and unscientific observer.

MY LEAVE OF ABSENCE

We were quartered in Athlone. Forty years ago—and the date of my story goes so far back into the dim past—Athlone was one of the most agreeable stations in Ireland, or, indeed, in all the British possessions. Plenty of dancing, hunting, dining, flirtation, and miscellaneous amusement. The inhabitants, especially the younger and fairer members of the community, worshipped a red coat, and adored a pair of epaulettes. If they admired one thing more than infantry, that thing must have been cavalry; for Athlone is a horse-loving place, with a weakness for steeple-chases. We were infantry, but we had no reason to complain. The fiery Westerns had received his majesty's Hundred-and-Ninth with the warmest and most brotherly hospitality. The young ladies had not been chary of their smiles. Our winter had been a blithe and pleasant one, and is still treasured up in my memory; and the summer, with its picnics and races, had not been far behind it. It was autumn when I asked our kind old colonel for a month's leave of absence. I had received an invitation to pay a long visit at a great country-house situated near Kells, the mansion of Miles Brackenbury, one of those ultra-hospitable Irish squires long since extinguished by the Encumbered Estates Court. 'Come, my dear boy,' the letter said, 'and stay till you're tired of us, or till Easter; and sooner the last than the first. Cock-shooting is just begun; the woods are full of birds, and the house is full of company; you'll always find a nag at your service, when the *Clash-naclachan* hounds come within reach; and so no time for more, but *ceade mille faileagha!*' The good old man might have added to his list of attractions a cellar full of wonderful old claret, perhaps unpaid for, but sound and good, and the presence of half-a-dozen high-spirited daughters, the best waltzers and horsewomen in the county. Mr Brackenbury was not an old friend of mine or my family, as might be supposed by the familiar kindness of his epistle. He had made our acquaintance at assizes, when his duty as a grand-jurymen brought him to the town, and when he had dined repeatedly at our mess. Why he had taken a particular fancy to myself, then a raw subaltern not long emancipated from Sandhurst, I really cannot say. My own experience, however, leads me to fancy that an Irishman commonly bestows his friendship on an Englishman, in preference to one of his own countrymen. Now, it happened that—except the adjutant, the colonel, and the major—I was the only South Briton in the Hundred-and-Ninth. Most of our officers were natives of the Green Isle; and to my nationality, coupled as it was with a more than Irish love for field-sports, I believe I owed Mr Brackenbury's goodwill. He invited me, at any rate; the opportunity was too tempting to be neglected; and I easily obtained the colonel's consent.

'How are you going, Willoughby?' asked Douglas, the captain of our light company, as he stood smoking at the barrack-gate, among a knot of our fellows. 'How are you going? I shall drive the tandem to Mullingar to-morrow, and I'll give you a cast so far, if you like.'

'Hang it, Douglas, you promised to take me. Don't you remember, just before you revoked at whist last night?' cried Rogers of the grenadiers.

'But what's Willoughby about, poring over the

map, as if he were a bailiff about to distract on somebody?' asked some one else, calling attention to my studious attitude.

'I shall go a new way—a way of my own. I'm sick of gigs and tandems; and I know the face of every barnaid and beggar from this to Mullingar,' observed I.

'What does he mean by a new way?' 'A balloon?' 'A donkey and panniers?' suggested three of my brothers-in-arms.

'Sure,' said O'Shea, 'Willoughby's getting too wise and sober to go rattling about in gigs like the rest of us; he'll order out a "yellow," and a pair of spavined bays, and do the thing genteel.'

'You're out, O'Shea, for once,' said I, laughing, 'for I mean to walk.'

'To walk!' repeated all the officers present, in a tone of amazement that could not have been more genuine had I proposed to fly.

Pedestrian tours, in truth, were unknown things in my young days; nobody dreamed of trudging who could afford to ride. But when I convinced them that I really meant what I said—that I wanted to see a new and wild part of the country, and to get, perhaps, a little snipe-shooting on my way, there was a chorus of expostulation. 'Strike out a path for yourself across the Bog of Allen? Why, man, 'tis in Swift's Hospital you ought to be, with a head shaved as smooth as a billiard-ball.' 'You'll catch the ague!' 'Or be smothered in a quagmire!' 'Or tumble in among the Whiteboys. I heard Captain Rock and his rapparee rascals had been at the old work near the Curragh last week.' But I was resolute, perhaps I ought to say obstinate. A very young man is so jealous of his new independence, that he cannot endure to take advice. Besides, I really felt a wish for the walk. Twice, when on a 'still-hunting' expedition, I had obtained a glimpse of the half-explored recesses of the huge Bog of Allen, and I had some curiosity to see more. I was in high health and spirits; a capital walker in pursuit of game; and I enjoyed the idea of performing the distance in a very short time, and of gaining some credit by the feat. Accordingly, I sent on my portmanteau by coach, placed a few necessities in a game-pouch, filled my shooting-belt with No. 10 shot, and my flask with Dartford powder, and made my servant clean my Joe Manton, till stock, lock, and barrel were as clean as a new sixpence. Then I started, with my sporting accoutrements buckled on, and my double-barrelled gun over my shoulder. Moore, O'Shea, and McVitie the doctor, walked with me to the second milestone, where I was to quit the road, and strike off across the country. They were all three good-natured fellows; and seeing that I could not be bantered or frightened out of my pet project, they were anxious to give me advice as to how I might best escape any dangerous adventure. Indeed, the Ireland of forty years back is removed by what might appear a century of progress from the Ireland of to-day. The ashes of the rebellious spirit of '98 still smouldered, and ever and anon blazed up into fitful flame. The people were miserably poor, ignorant, and discontented. Religious disabilities had not yet been done away with; and Orange injustice was bitterly avenged by midnight burnings and assassination. The mountains and bogs were full, not only of Rockites and Whiteboys, but of illicit distillers, between whom and the troops that hunted them there was the deepest animosity. My brother-officers spoke truly and sensibly when they assured me that it was not safe for one who wore the king's colours to trust himself alone in the midst of the lawless peasantry. But at nineteen years of age, we are not apt to accept a warning; so on I went, laughing and chatting, till we got to the second milestone.

'A wilfu' man maun hae his way,' said the doctor,

taking snuff, and eyeing me as ruefully as if I had been on the verge of destruction.

'Don't sleep in any blackguard little shebeen, I advise you,' said Moore, who was a senior lieutenant and a steady fellow; 'and be sure you avoid giving the people any pretext for a quarrel. Don't be caught napping; and mind you have the gun in good order, in case of the worst.'

'And, Charley, if they make an end of you among the bogs, be sure you tell them you belong to the Hundred-and-Ninth: it would be a satisfaction to the regiment to bury you decently,' observed O'Shea, an inveterate joker.

'Hark ye, Willoughby, ye daft callant,' said the doctor, who spoke much broader Doric than his modern representatives from Edinburgh or Aberdeen; 'we would no be pleased to hear that you'd been coupt into a peathole, nor yet had your throat cut from ear to ear, among these wild Irishers. So be canny and quiet, my lad, and dinna speak any nonsensical compliments or daffing to the lasses, and keep out o' mischief and arguments, and push on to sleep at Barrynaclish, where there's a very decent inn, to be in Ireland.'

'Mind you keep a bright look-out for Captain Rooney, the highwayman,' said Moore; 'and don't be squabbling with that Mr Connell, that you cleaned out so prettily at the mess last week, in case you meet him at Mr Brackenbury's table. He was a close chap, but he dropped a hint that he lived near Kells when he was at home.'

'He gave Willoughby a look as black as thunder when he got up from the table,' said O'Shea, laughing. 'There'll be a fine piece of work if they come together again. I never saw a fellow come for wool, and go back so completely shorn. But, Charley, the saints, as my grandfather used to say, be with you, if you meet Red Peter and his gang, and!'

'Confound Red Peter and his gang,' cried I gaily, as I shook hands with the honest trio; 'good-bye, good-bye, old fellows. We shall meet at Mullingar, for old Brackenbury and his family always go over to the ball on the 27th; and I engage to supply the mess with wood-cocks.'

I turned back twice, to wave my hand to the little group still standing beside the second milestone; then I got over a turf-wall, scrambled as best I could through some excessively soft and treacherous swamps, and lost sight of my friends. I walked rapidly, and within two hours had made considerable progress. The Bog of Allen, even now, when its long-neglected wastes have turned out very gold-mines with respect to paraffine candles and peat-charcoal, is a strange russet region of brown turf and stagnant water. But in the day of which I speak, before modern agriculture and drainage commissions were known, and when no one dreamed that clear oil and pure white candles could be conjured out of the black bog-earth, the vast quagmire presented an aspect of the sternest desolation. Still the day was fine, the weather dry for Ireland, and I strode along with a light heart and active limbs, unsaddened by the gloomy sterility of the treeless landscape. Everywhere the same turf-stacks, the same dikes intersecting the fields, where a few lean cattle and shaggy horses pastured; the same sullen pools of water, stained purple, crimson, or inkly black, by the peat that bordered it. Now and then, I flushed and shot a snipe; sometimes the big black Irish hares, looking gigantic in my English eyes, would start up under my very feet, and scud away like shadows across the bog.

Sometimes I nearly stumbled over a cluster of wretched cabins, which I had taken for turf-stacks, and which hardly seemed habitable by human occupants, until a swarm of barefooted children ran out, setting up a wild clamour in the Erse language at the sight of a Sassenach gentleman. But I encountered

no labouring-men or travellers, though at a considerable distance I could occasionally see a few turf-cutters plying their spades among the quagmires. The track I was following was a broad one, practicable enough at that season of the year, but which would have been impassable after heavy rains. It ran through a very wet and unfrequented part of the morasses, and by following it, I was able to cut off a considerable angle, and to shorten the distance by several miles. Up to the present time, I had known my way pretty fairly, having pushed thus far into the bog when accompanying, in the execution of a common but unpleasant duty, a party of soldiers detailed for 'still-hunting.' But there was a wide difference between traversing the district at night, under the guidance of excise-officers familiar with its features, and making my own way across it by the help of recollections; therefore, when I came, towards two o'clock in the afternoon, to a place where several roads and paths, each more rugged and execrable than the other, united in front of a little hamlet, I was fairly at fault. I met two or three wretched-looking women, staggering home under the weight of the ponderous turf-creels which their husbands had filled; from them I inquired my way, but they were, or pretended to be, wholly ignorant of English. They shook their heads, and curtly answered in Irish that they 'had no Saxon.' But my eye suddenly lit upon a cabin superior in comfort and size to the other huts, and which was evidently a whisky-shop or shebeen. Not only did a withered branch overhang the door, but a half-effaced inscription, the work of some Athlone house-painter, set forth that 'Bridget Mc'Carthy' had some connection with 'spirits' and 'tobacco.' A good-humoured country-girl, not in the least pretty, but with a pleasant expression in her freckled face, was busy with her spinning-wheel at the door. She gave a jump of surprise as she espied me, rose and curtained half timidly. 'Did my honour please to want anything?' The words were English at any rate, and they were welcome to my ear. I forthwith mentioned my desire to learn the shortest way to the place where I was to spend the night, and I also asked for refreshments. Was there any ale? The girl shook her head.

'Mother,' she said, 'had nothing but just the groceries, barrin' praties and bacon.' I declined the latter, for I had been thoughtful enough to bring with me some sandwiches in a case, but I had no objection to some whisky and water.

'Mother!' screamed the girl, 'a gentleman at the door!'

From the interior of the cottage forthwith appeared a tall bony woman, whose long dark hair, dashed with gray, flowed over her shoulders like the mane of a wild-horse. I daresay Mrs Bridget Mc'Carthy had been a fine woman in her youth, somewhat in the Lady Macbeth style, but now she was grim enough to have been one of the Furies in person. She wore a man's frieze coat over her feminine attire, and was as rough and fierce as her daughter was neat and gentle.

'Who's this?' she asked of her daughter, after casting a suspicious glance at me.

'A strange gentleman, wanting to be tould the way to Barrynaclish,' said the girl; 'and he'd like to take some drink, mother; but sure I couldn't ask him in.'

These last words were spoken in a whisper. The elder female impatiently shrugged up her shoulders, and said something in Irish, on which the girl vanished into the house.

'You're a sodger officer?' said the hostess abruptly, fixing her piercing black eyes first on my cap, and then on my face. I then remembered that I wore a forage-cap, the only part of my equipment which could have betrayed the military man, but I felt some uneasiness at the woman's remark.

'A good guess, mistress,' said I, as carelessly as I

could; 'and now, if you will give me a drop of poteen, and point out the road to Barrynaclish.'

'What shall I earn for my pains?' cried the landlady with startling fierceness. 'Is it more blood you'd have? And do you dare to ask me the way to the place where your red-coated butchers—Bad end to ye, and all the rest of the inmates of the poor!'

'More blood!' Was the woman sober? Yes, her fiery eye was quite steady as it glared upon me. Her voice quivered with the agitation of strong hate, not of intoxication. But before I could speak, the daughter came tripping out of the house, bearing in her hand an *egg-shell* filled with pure whisky—no uncommon substitute for a wine-glass in such out-of-the-way places.

'Would my honour take a taste of the dew, nate? Sure, she had set the kettle on, but the wather would take a few minits to hate before 'twas fit for the punch.'

The daughter was as smiling and civil as the mother was the reverse. I had not the heart to refuse the primitive goblet she proffered me; I drank the whisky at a draught. It was excellent.

'Good stuff this; too good to be "Parliament,"' said I with a laugh. Now, in general, you can pay no greater compliment than this to a shebeen-keeper; but my praise of the liquor merely made Mrs Mc'Carthy stretch out her long arm, and mutter something in Irish, which sounded very unlike a blessing.

'Hush, mother, hush!' cried the girl; 'whiaht, then. Would you please to sit down, sir?—and she offered me the chair that stood beside the spinning-wheel. 'Mother's not quite herself to-day, sir, by rayson of there bein' a corpse in the house. Sure, alannah, the young gentleman had no share in it!' For the fierce hostess was again grinding out curses between her teeth.

'Indeed,' said I, 'you do me no more than justice. I guess, from what you say, that some one has lost his life in some unfortunate collision with the troops. I hear of it now for the first time.' Then I remembered that a detachment of the Hundred-and-Ninth, under Captain Cameron, had been for some time stationed at Barrynaclish, for the purpose of suppressing illicit distillation. It turned out that on the preceding night a skirmish had taken place between a party of ours and some outlawed smugglers, and that a man had been shot dead on the spot.

'Twas a poor boy from Kerry, sir, and he had no kinsfolk within miles and miles,' said the girl sadly; 'so they brought him here for the wake and the burial, and the coroner comes to-morrow. My heart bleeds for the poor mother, fur off to the south, that doesn't dream yet that she'll never see her son more.'

I expressed my regret for the unhappy occurrence, and Mrs Mc'Carthy became so far mollified as to discontinue her anathemas. I informed the hostess and her daughter that I was not going to join the detachment at Barrynaclish, but to pay a visit at a considerable distance off; and under existing circumstances I declined to await the boiling of the kettle, and presented Mary with half-a-crown in payment for her whisky. A couple more half-crowns, judiciously bestowed for the wake, propitiated Mrs Bridget so far as to turn her curses into blessings. 'And now, my dear,' said I to the handmaiden, 'I shall be obliged to you for directions as to my way.'

Mary's instructions were explicit enough. I was to turn to the left as far as the burned cabin, and then to the right, and so by the meadows and the big pool, and if I kept straight on towards the mill I should see against the sky, I should reach the fine carriage-road itself. 'But be sure, sir, you tread carefully in crossing the bog, for 'tis dangerous walking. And when ye git to the hard road, then, be sure, sir, ye beware of the captain.'

The captain! what captain? But the girl gave

me a frightened look, laid her finger on her lips so rapidly that the gesture passed unobserved by her gaunt parent, and dropped me a farewell curtsy. It was certain that she had intended to give me a friendly warning, and as certain that I could not divine her meaning. I thought of it as I trudged along the track she had indicated, past the burned cabin, and straight on for the distant mill. But I had soon plenty of occupation for my faculties in crossing a treacherous bog, which required to be traversed with extreme precaution. I got well over the trembling surface at last, and before very long I came on a broad road, much neglected, but still practicable for wheel-carriages. My thoughts now took a wider range. I remembered the purport of my solitary journey, and the comments and advice of my brother-officers. I thought, too, of the half-jocular recommendation I had received, not to be led into a quarrel with our late guest, Mr Connell, should we meet at Mr Brackenbury's hospitable board. And now I may as well explain what my friends meant by remarking that I had 'cleared out' the pockets of the gentleman in question. I had not won a sixpence from him at cards or dice; there had been no gambling at all, in the common sense of the word. But the Irish gentlemen of that day were addicted to an amusement called 'challenging,' in which two persons exchanged, or offered to exchange, some articles of property, an arbitrator being selected to award the precise money premium to be paid in either case. Military messes were not slow to adopt this custom, always provocative of a great deal of mirth and diversion, and the Hundred-and-Ninth had caught the epidemic. Skill and luck combined curiously to render such exchanges uneven, and I have known ill-starred aspirants lose all their personal property, down to the clothes they wore, and for the loan of which they were indebted to an opponent's forbearance. So had it fared with this Mr Connell, a man whose acquaintance some of us had formed casually on a race-course, and who had repeatedly dined with the regiment. He was a dark, saturnine, middle-aged man, of no slight tact and worldly knowledge, but he had been signally worsted in an attempt to pigeon himself, whom, as one of the junior officers and an Englishman, he had deemed an easy prey. To be sure, though I won his gig, his bay mare, and his brown horse, his watch, pistols, driving-cloak, and diamond breast-pin, I had been an indulgent conqueror; I had allowed him to ransom the whole spoil on easy terms, and had been playfully rebuked by our own fellows for letting him off so cheaply. But this clemency had not taken away the smart of defeat; the young officers of the corps had quizzed the beaten man most mercilessly; and it was with looks that boded little friendship that Connell had given me a cold shake of the hand, muttering something about 'having his revenge at another time.'

'On my conscience, Willoughby,' O'Shea had said, 'when that fellow said he'd have his "revenge," he looked mightily as if he meant it. 'Tis pistols and coffee he'll be inviting you to yet, old boy.' But I had nearly forgotten Connell and his black looks, until I remembered him as I turned into the road, and gave an involuntary chuckle as the scene of his defeat arose again before me. The sun was setting low, and a mist already lay, like a soft white sheet of gossamer, over the brown morasses on my left. There were no milestones to be seen, and I could only guess my distance from the village. A frieze-coated peasant whom I met leading a calf in a string, told me that Barrynaclish was two miles off, 'or maybe a thrifle more.' Irish miles are long, but the 'thrifle' proved longer still; the twilight fell and deepened, and yet I saw no signs of the whitewashed houses and squalid hovels of Barrynaclish. The bitters were booming in the swamps to the west and north; I heard their harsh cry, but no other sound. What was that? The tramp of a horse! No very remarkable phenomenon on

an ordinary road, but in this lonely region it acquired a new character. The beat was quick and heavy; the steed was evidently trotting at that brisk pace which was the boast of the old Irish breed. Presently a man in a huge many-caped coat, with a broad-brimmed hat slouched over his brows, and mounted on a powerful horse, came thundering past, and reined up his foam-flecked steed a few yards in front of me.

'Good-evening, sir,' said the stranger, in a hoarse voice that struck me as being an assumed and unnatural one; 'can you tell me the distance to Barrynaclish?' I moved on a pace or two, with my gun thrown into the hollow of my arm. I hardly relished the newcomer's looks and tones. The country was still in a disturbed state, and, independent of agrarian outrages, Captain Rooney, as he was called, gave almost as much annoyance to those who had anything to lose, as his more famous predecessor on the highway, 'Captain' Freeney. 'Can you tell me the distance?' asked the man impatiently.

'About a mile, I should say; nothing to a stout nag like yours,' I replied, rather coldly. The man gave a laugh.

'You are a stranger to these parts,' said he, 'and so am I. I'm going north from Kildare market. We can push on to the village together, and then we shall be the better able to keep off highwaymen.'

'Much obliged for the offer, sir,' I returned, more and more doubtful of the intentions of my new acquaintance; 'but I am on foot, you on horseback. We must go on at our own pace, as before.'

'Nay, I was always of a companionable nature,' said the horseman, good-humouredly, as he swung himself out of his saddle, and prepared to lead his nag by the bridle; 'and would rather walk and talk than ride in silence.'

I was puzzled, but there was an appearance of hearty frankness in the horseman's speech and action which in a manner debarred me from giving him an unfriendly answer; so we walked along for some distance, the stranger leading his horse, a fine animal, dark brown, with one white foot. I kept my right hand on the lock of the gun, which I carried across my left arm, and watched the traveller narrowly, but he shewed no sign of distrust or hostile design.

'Are you from the south, if I may make bold to inquire?' asked my fellow-wayfarer.

'No,' I replied; 'I'm from the west. It's Athlone we're quart'— Here I stopped short, inwardly chiding my imprudence, for I had been about to reveal my true character, and, for aught I know, the stranger might be a chief of the Ribbonmen or Rockites. The man gave a start, and looked hard at me. His face was as much concealed by the slouched hat, cape, and a handkerchief he wore round his neck, as if he had been masked, but I saw his eyes sparkle through the dusk.

'Ah! an officer, then; on leave, I dare say? Do you belong to the dragoons, or the Hundred-and-Ninth, captain?' Every military man in Ireland is called captain, by a large majority of the population, and to a subaltern, particularly a junior ensign, there is something winning in the sound of such a title.

'The Hundred-and-Ninth,' answered I, trying to catch a glimpse of his features. 'We have met before, I daresay; I seem to remember your voice.'

'Sure, so do I yours,' responded the man drily. 'Mr Willoughby, if I don't mistake?'

'At your service,' said I; 'and your name'— Crash! The question on my lips was cut short by a sudden and fierce blow with the but-end of the ruffian's loaded whip, which fell like lightning on my unguarded head. I staggered under the cowardly stroke, the blood trickling from my temples, and a thousand fiery sparks dancing before my eyes, but I did not fall. Almost mechanically, I lifted my gun, and brought the stock to my shoulder. Ere I could cock it, however, the muffled horseman sprang upon me with a

savage imprecation, grappled me by the throat and collar, and we both came headlong to the earth. There was a desperate struggle; we were on our feet again, and locked in furious encounter: my nerves and muscles seemed to brace themselves for the contest, in spite of the treacherous blow I had received. The robber, for I at once guessed the truth—that I had to deal with the notorious Captain Rooney—was a far stronger man than myself, and possessed the firm muscles which only belong to robust persons whose lives have been passed in the open air, and nothing but my west of England skill in wrestling kept up the uneven strife. The highwayman's horse, the bridle dangling from his neck, stood by, snorting and pawing the ground.

'Bad cess to ye!' panted Rooney, as he wound his sinewy arms round me, and put forth all his powers for my defeat; 'twill be wise of you to knock under at once. I've grudge enough against you already.'

We reeled towards the bank; the robber's hat fell off, and the newly risen moon threw her light on his swarthy features, distorted by rage and excitement. 'Mr Connell!' the words broke from me half unconsciously. Yes, it was our guest at mess, the sporting-gentleman who had been worsted in his effort to pigeon the raw ensign. My surprise was fatal; for a moment I stood unnerved, on the next I was lying in the road, my enemy's knee on my chest, his hand on my throat, and a pistol-barrel glimmering before my eyes.

'Ye know me, do ye? I'll stop your mouth onst and for all,' growled the villain, as he gasped for breath. There was a dreadful pause, only broken by the click of the lock. I looked up, and saw the deadly weapon pointed full at my forehead. There was no hope. 'I swore I'd have my revenge. I told ye, I'd meet ye again,' said Rooney, or Connell, whose voice was thick with fury, while his tone and language were those of a rough untutored rogue, and all his outer husk of gentility had deserted him—and met we have. The gay redcoats laughed, did they, when you won my property from me! I'll tache one of them to laugh another way. Take that! I closed my eyes, and breathed a silent prayer for Heaven's mercy, as I felt the cold muzzle of the pistol pressed between my eyes. But I scorned to utter a word of entreaty to the assassin. The horse whinnied, and scratched the ground with his forefoot. The robber started.

'Some one coming, eh! *diao!* they shall find your skull emptier than nature made it, for brains.' And with this brutal taunt he pulled the trigger. The pistol missed fire. I made a violent effort to rise, calling loudly for help.

'Howld your prate, fool!' growled the highwayman. 'You won't? then here's to insure your silence.' And he dealt me a couple of strokes across the head with the butt-end of his weighty horse-pistol, and my senses left me.

When I recovered enough to open my eyes, the moon was riding high among a fleecy pack of white clouds; the dusty road was in the full track of the moonshine, while the morass beyond, full of peat-bogs and mouldering piles of turf, was in deep shadow. I was quite alone. My limbs were stiff, and my blood was chilled with the night-dews. As for my head, it ached with a dull pain almost insupportable, and a shivering as of ague ran through my frame. My brains were still confused, but mechanically I put up my hand to my aching head, and was surprised to find that my hair was wet and matted with a dark fluid—the blood that had oozed from three wounds inflicted by my late assailant. In a kind of stupid surprise, I looked at my gory fingers, and marvelled at the plight in which I found myself. Slowly did memory return, shewing me, as in a dream, the recent struggle and my narrow escape with life. Of the robber and his horse, no trace remained. My pockets,

I found, had been thoroughly emptied and turned inside out. My watch and money were of course gone, and so were some other trinkets, even to my gold sleeve-buttons; but a valuable ring which I wore, and which was dear to me for the sake of the giver, had escaped the eye of the plunderer, who had probably done his work rapidly, in fear of the arrival of those at whom his horse had taken alarm. Had he left me for dead? Most likely that was the case. But how cold it was, and how my poor head throbbled, while the wounds smarted in the frosty air. I should be dead enough in real earnest before morning. Summoning all my energies, I strove to rise, and by a great exertion reared myself on my elbow. It was nearly dark, the moon was on the verge of the sky, the white clouds looked gray and dim. I was very cold and trembling, but my heart was beating fast, as if fighting against approaching death. I heard voices close to me.

'Twas hereabouts the gosssoon saw the horse, Mike.' 'Stuff, I tell ye. Some farmer going home on his ould garron of a nag. And if there *was* thruth in the boy's discourse, sure, 'tis nothing to us.'

'Holy Moses! there lies the man that was robbed, dead as Brian Boroihme himself.'

I looked up through my heavy half-shut eyes. Five men, loaded with kegs, were contemplating me by the shaded light of a lantern. They were dressed in the common frieze-coats and brimless hats worn by the peasantry, but there was something wild and savage in their air; two of them were barefoot, and all had haybands twisted round their legs, as a rude substitute for stockings.

'The captain's made clean work of it this time,' said one of them sententially.

'It's a son of old Trench of Glasnamara,' asserted another.

'Tush!' cried a third; 'he's no more a Trench nor myself. 'Tis a sodger officer. Sarve him right, say I, and I wish the captain would rid Ireland of the breed of them.'

'Bathershins!' exclaimed the most 'good-natured' ruffian of the group, dropping on his knees at my side; 'I believe he's only kilt, not dead at all. Shew a light, boys. His eyes are open.'

'What's to be done, now?' asked another.

'Lave him where he lies: the coulf frost will finish him before mornin',' observed one philanthropist.

'Mike's right: the curse of Cromwell on all redcoats,' chimed in another.

I tried to speak; my tongue refused obedience; I could not utter a word. But the man who knelt beside me sprang abruptly up and spoke with great energy, at first in Irish, then in English. The Erse was unintelligible to me, but the English was not wanting in a sort of eloquence.

'See now, boys, sure as the blessed moon's yonder in the sky, 'tis enough to bring a curse on the lot of us. Sarve us right if every sup of whisky were spoilt in the still, or taken by the thieving gaugers. Look at the poor young gentleman, lyin' there before you, helpless and bloody, and you to be lavin' him to perish—a Christian man!—'

'He's no Christian, Tim. I'll warrant him a Prothestant, and an Englisher too,' remonstrated one of the hearers.

'What o' that, Jen? Sure, ould Miles Brackenbury's a Prothestant too, and has he not stood our friend many a time when we were in trouble, and the Orangemen would have shipped us off for iver to hunt kangaroos! Shame on ye! A butcher would have more heart for a hurt lamb than you for a fellow-cratur.'

I think the discussion was prolonged, but I heard only an indistinct gabble of words before I again grew faint. When I recovered consciousness, I was wrapped in a frieze-coat, and being borne along by four active men over a wild part of the country. Tim, my

preserver, walked beside me, and seemed to watch over my helpless condition with some degree of attention.

'Stop a minit, boys; the young gentleman's coming to himself. Take a dhrop, captain; 'tis the finest thing in the world agin the faintness.' And he put to my lips a flask of coarse green glass, containing pure whisky, which had never paid toll to the royal revenue. I took a moderate pull at the contents, and certainly felt the better for the artificial glow thus imparted. Off we went again. It was wonderful to observe with what a light, easy tread, with what swiftness and sureness of foot, those hardy outlaws carried me over the most dangerous ground. The path lay across immense morasses, where the earth quaked beneath every footstep, where it was necessary to spring from island to island of firm soil in the middle of a miniature ocean of weedy slough. On either hand lay quagmires and slimy pits of unknown depth; and deep pools of dark water, or peat-coloured streams, had constantly to be skirted. But the smugglers picked their way with infinite skill, and halted on until, from behind a ruinous wall of turf, the hail of a wild sentinel checked them.

'Stand, or I'll shot ye.'

'Friends.'

'Kape off, nabocklish: we're not to be caught napping. Give the word, can't ye?'

'Vinegar Hill! Will that content ye?' asked Tim.

'Whoop! ye're welcome,' answered the frieze-clad sentry, shewing his rags, his shaggy head, and his rusty gun, over the crumbling wall. 'Red Pether's come back, and a blessed temper he's in. What have ye got there?'

'A poor young chap, hurt by that divel Rooney,' said Tim, as we passed on.

'And my back's nigh broken with carryin' him, let alone the kegs,' cried one of the other men, and the rest of the thoughtless fellows broke into a hearty laugh. A wild scene the camp afforded. There were no tents, but a score of wigwams roughly built of sticks and turf, and very inferior to the 'lodges' which beavers construct. Thirty fires were burning with the rich crimson glow peculiar to incandescent peat, and each had its still of pewter or copper, glinting in the ruddy light, and watched by some old man or crone with dishevelled gray hair and tattered cloak. A brighter fire of peat, mixed with brushwood, burned in the midst, and before it was slowly roasting a stolen sheep, cut into quarters, and ingeniously suspended by haybands from a structure of sticks. This fire and the cookery seemed under the charge of three or four half-clad boys and girls, presided over by a witchlike old woman in a tattered red cloak, who brandished a long iron ladle in the operation of basting. The ground was covered with sacks of grain, piles of potatoes, barrels, bottles, pack-saddles, and ready-cut peats for fuel. Nine or ten men, in frieze or dilapidated broadcloth, lay dozing among the heaps of turf, and several women were conversing in low tones within the wigwams. The whole encampment realised a perfect picture of savage-life. Our appearance created a sensation. Not only the roast meat, but even the stills were left to take care of themselves, while men, women, and children crowded up to stare at me, and to ask clamorous questions of my escort.

'Where's Red Pether?' asked Tim, when the curiosity of the crowd was somewhat appeased.

'Sure he's in his cabin, yonder,' said an old woman, pointing to the largest hut; 'and what he'll say when he sees the officer, the saints know best!' And the speaker crossed herself, and shook her wrinkled head ominously. Red Peter! I began to remember the name. It was against this man, famous in the annals of illicit distillation, that my brother-officers had warned me. In a moment more, the redoubtable Peter appeared. He was very tall and gaunt, with a pale face, scarred with cicatrices that added much

to his ugliness; and his red hair, hanging in a fiery mop almost to his shoulders, proved his right to the appellation he enjoyed. This captain of smugglers was dressed in an old green coat with the gilt buttons of some defunct Hunt, perhaps a trophy taken in war; the rest of his costume was of fustian and corduroy, somewhat less patched and torn than the apparel of his followers. He had pistols in the hay-band that encircled his waist, and carried a fowling-piece in his hand. A long and vehement discussion ensued, partly in Irish, on my fate. Tim, as before, was my advocate; Red Peter was decidedly in favour of putting me to death as a member of the noxious race of red-coats. The audience swayed to and fro, siding with each orator in turn; but at last Red Peter stamped his foot, exclaiming: 'Arrah! stand aside; put the cratur down on the turf. 'Tis but the crookin' of a finger, and I'll have revenge for the Kerry boy, poor Sullivan, the red butchers murdered yesterday.' Down I went on a pile of peat. Red Peter cocked his gun, and even Tim drew back, though still protesting loudly against the cruelty of such an act, when forth from the principal hut came two women, one tall and swarthy, the other comely and light-complexioned, and the latter ran forward with a cry, and caught Red Peter by the arm.

'Shame, father, father; don't black yer sowl by such a wicked thing. Sure, the poor young man's innocent of the blood spilled last night. He's from Athlone; he called at the house to-day, to ask his way, and very civil he spoke, too.'

It was Mary McCarthy, the daughter of the shebeen-keeper, who had thus come forward in the nick of time, and her terrible mother, following, corroborated her daughter's assurance, though in a grudging and sulky fashion. Even in that extremity of mortal peril, I could not help smiling at the strange idea suggested itself that here was I, like a new Captain Smith among the savages, saved from instant death by an Irish Pocahontas. 'I hope,' thought I, 'the resemblance will go no further. I trust that I shall not be compelled by the inexorable destinies to marry my fair preserver. If so!—But my reflections were cut short by an almost unanimous and very noisy entreaty that Peter would lay down the gun. To this day, I have never felt sure whether the outlaw—who was not entirely sober—had blood-thirsty intentions, or merely meant to frighten me by a show of violence; at anyrate, he complied with the wish of the assembly, and permitted his wife (for his name turned out to be McCarthy) to disarm him. In a few minutes the crowd that had gathered round me dispersed to return to their several avocations; and I was left to the nursing of Tim and of Mary McCarthy, both of whom treated me with a gentleness surprising in beings so rudely nurtured. The hurts which the robber Rooney had inflicted were dressed and bandaged by one of the elder women, who had a wonderful repute for mending broken heads and curing flesh-wounds. One of the huts was assigned as my temporary abode; and during the week I spent among these wild people, I was attended to with a thoughtfulness and kindly good-feeling, of which I cherish to this day a grateful recollection. Before Red Peter would suffer me to leave the camp, he exacted from me a solemn promise that I would never reveal its locality, a promise which I need scarcely say was never broken. Tim guided me by a series of intricate paths to the Kells road, and did not take his leave of me till I was within sight of habitations. Six hours afterwards, I was under the shelter of Mr Brackenbury's friendly roof, and the strange scenes I had gone through appeared like the phantasies of nightmare.

I have little more to tell. Red Peter was tried at the Athlone assizes two years later, and was sentenced to transportation for life. In Van Diemen's Land, he made his escape, became a troublesome bushranger,

and was finally murdered by his companions for the sake of the government reward for his head. Tim, a fellow too good for his trade, was placed at the bar a year before, and got off with a short imprisonment, in consequence of my testimony as to his having saved my life. He married his sweetheart, Mary McCarthy, and I was glad to enable the young couple to take a farm in Connaught, where they have thriven, and still reside. Captain Rooney—*alias* Connell—was hanged at Ennis in 1829. The smugglers of the Bog of Allen carried on their desperate traffic for some years, frequently taking and losing lives in their contests with the military and excisemen, but our regiment was transferred to the North, and we saw no more of them. Wide indeed is the gulf that separates the Ireland of forty years back from the peaceful and contented Ireland whose prosperity and improvement go hand in hand with our own.

THE FOLD AND THE STALL.

Few will dispute the maxim of the king of Broddingnag, that whoever makes two ears of corn, or two blades of grass, grow upon a spot of ground where only one grew before, deserves better of mankind, and does more essential service to his country, than the whole race of politicians put together. The farmer has indeed a great mission to fulfil, and if, for a time, he did not rise to the height of his vocation, a change has at length come over the spirit in which he pursues it. If it were only possible to put the first Christmas Cattle-show, which was held in a stable-yard off Smithfield Market, in 1789, by the side of the last show in the Baker Street Bazaar, everybody would be astonished at the immense difference between the farmers and the farm-stock of the two periods. Vast as have been the strides which we have made, during the last hundred years, in all branches of material progress, there is scarcely any in which the advance has been more prodigious than in agriculture. The literature of the farm is, however, for the most part, so purely technical, that few persons beyond the circle of the profession have any adequate conception of the improvements which have been effected in that branch of industry. It is hardly too much to say that the agriculture of our country, at the commencement of the last century, was comparatively little ahead of that described in the *Georgics*; and one has only to compare the observations of Arthur Young with those of Caird and Stephens in our own day, to discover that a complete revolution has been worked. Bacon is said to have made a collection of works on agriculture, and after perusing them, to have burned them in disgust, declaring that they were worthless, because they contained no principles; and this remained the defect of the system, till such men as Coke and Bakewell elevated a blind and thoughtless occupation into a science. A brief view of what has been done in one department alone—that of stock-breeding, to which, in our country, the cultivation of the soil is rapidly becoming subordinate—will shew the general character of the movement.

Brillat-Savarin declared that the destiny of nations depends on the manner in which they nourish themselves; and Sydney Smith used to say that the great end of government is roast mutton. Without considering how much of our vigorous, robust character as a people is traceable to our liberal consumption of the first quality of meat, there can be no question that how to provide animal food for our large and quickly increasing population is one of the great problems of the day. Some idea may be formed of its magnitude from the fact, that the appetite of London alone is fed every year by 270,000 oxen, 30,000 calves, 1,500,000 sheep, and 30,000 swine, to say nothing of the flocks of fowl, the shoals of fish, and acres of green stuff, which also find their way down the long 'red lane' of metropolitan humanity.

It is computed that the total value of the flesh imported into London, from all quarters, living and dead, cannot be much less than £14,000,000 annually. We are compelled to seek contributions from other countries, and yet the production of our own land has been multiplied a hundredfold since the days of royal Farmer George.

Our great-grandfathers—in some quarters, our grandfathers—never knew the luxury of having fresh meat all the year round. They had fresh meat only from about August to November; and had to content themselves with beef salted and hung after the manner of bacon, during the winter and spring. Who ever hears of hung-beef now? In those days, the ox was still used as a beast of draught, and the cow was looked to chiefly for milk and calves; the sheep was regarded more for its wool and tallow than for its flesh; indeed, scarcely any attention was paid to the production of good meat—that was only a secondary and after-use to which the animals were put. The roast-beef of Old England, about which we sing with such gusto, must have been something very different from the noble sirloins of the present years of grace. The art and mystery of manufacturing meat was in its infancy, in fact, was barely born, when Arthur Young commenced those memorable journeys of his through the counties of England, and examined their agricultural condition. The roads were little better than ditches, hardly passable at some points in summer, and quite impassable in winter, or after heavy rains; hence, the farmers were restricted in the disposal of their produce, and in communications with their neighbours. Even in the country round London, the crops were very poor, and the land was worth, on an average, little more than twenty shillings an acre. Holkam House, which is now surrounded by rich and smiling acres, then stood in the midst of a desert tract, so unpeopled that Mr Coke used to say his nearest neighbour was the king of Denmark, and so barren that 'two rabbits fought for one blade of grass.'

'Sheepe,' says old Fitzherbert, 'is the most profitable cattle a man can have;' and it was in that description of stock that an improvement first took place. The movement commenced with the provision of a more ample supply of superior food, in the shape of the turnip. That singularly plastic plant which Linnaeus termed *brassica* has been a great boon to the farmer. By long cultivation, it has been strangely developed and transformed, till its leaves are now cabbage and cole, its roots turnip, and its stalk kohlrabi. The superior cultivation of that part of it which is called turnip was due to Lord Townsend, who, on retiring from public life in 1730, possibly with the maxim of the king of Broddingnag above quoted before his mind, devoted himself to agriculture, revived the ancient practice of marling the soil, which had fallen into entire disuse, and became celebrated as 'Turnip Townsend,' for his success in the cultivation of that useful vegetable. Upon the increased supply of food, followed naturally a corresponding increase in the number of flocks. Then Robert Bakewell of Dishley took the matter up, and adopting that great principle of 'selection,' which Mr Darwin tells us is at the bottom of nature's operations, founded a valuable breed of Leicester sheep. His skill in reproducing certain good qualities in the animals, and obliterating vices, was marvellous, and almost justified the rumour which spread among the bumpkins, that he could make sheep of any shape he pleased, as well as if he cast them in a mould, and direct the fat to any part of the carcass. He was disturbed in his designs occasionally, however, by those singular freaks of nature, as we call them, though, of course, they are regulated by some mysterious law, which revives the characteristics of some distant progenitor in the offspring of a family from which they have for generations been banished. His success brought the practice of breeding crosses

into popularity. He himself applied it to cattle. Coke of Holkham (afterwards Earl of Leicester) followed in his steps with more valuable results. The new breeds were superior in quality to those which they superseded, and sooner arrived at maturity, but they were much smaller, and the old farmers waxed wroth against the new-fangled scheme, which was substituting a 'race of rats' for the huge cattle of the ancient type. These prejudices, however, were overcome in time, and crosses multiplied. The finest and most favoured cross (it is now recognised as a distinct permanent breed) is that which was contrived by the Brothers Collings, and is known as the Teeswater or Shorthorn breed. The shorthorn is the most widely spread and increasing of the standard breeds; fully a third of the cattle disposed of in the London markets are of that kind, and traces of it are to be found in nearly all the compounds. Indeed, shorthorn bulls fetch by far the highest prices, often ten times as much as for those of other breeds.

It is startling to hear that farmers now a days can manufacture whatever sort of cattle or sheep you choose to order, just as a Lancashire mill will turn you out any description of cotton, or a Staffordshire foundry any quality of iron; but such is the case, although the operations of the farmer have not yet acquired the mathematical certainty of the weaver and the foundryman. A few years ago, for instance, wool and tallow appeared to be in greater demand than meat, and, accordingly, the farmers set to work to produce a sheep which would meet the new conditions. The New Leicestershire was the result, an animal which yielded a large fleece and abundant tallow, with but indifferent meat. The market has changed again, however; the farmers find that meat pays best, after all: the fat, large-framed sheep, which furnished such a lavish clip, has been discarded for one whose smaller bones are covered with better meat, and less coarse superfluous fat. The butchers are satisfied, but the woollen manufacturers are troubled at the falling off in their home supplies of raw material.

Agriculture is almost entitled to a place among the learned professions, for, as practised now a days, it demands a knowledge of geology, chemistry, botany, physiology, ethnology, and goodness knows what other ologies besides. The application of steam to agricultural purposes, which, by the way, was first attempted by General Bulwer, the father of the novelist, has been attended with success, and is being quickly extended. The ingenuity of our best engineers is taxed to improve the implements of husbandry, and no expense is spared in procuring the best weapons with which to subdue the soil. The annual production of the British implement trade (which exports largely) is stated to be not less than two millions sterling. Much science and experience is also expended in devising cattle-foods that will produce good wholesome flesh, and not coarse, oily fat. The farmer, too, has undergone a transformation along with his occupation. Arthur Young has portrayed one of the foremost agriculturists of his day receiving his guests in one huge chimney-corner of a long kitchen, hung round with dried joints of his best oxen, and clad in a loose coat, scarlet waistcoat, leather breeches, and top-boots. As late as 1835, the farmers at Tamworth, to whom he presented a couple of patent iron ploughs, refused to use them, because 'they were all o' one mind that the iron made the weeds grow,' and so stuck to the primitive old wooden implement. But the modern British agriculturist is of a very different stamp. There are no more dashing fine gentlemen in the country than the 'high farmers,' many of them men with a college education, who have several languages and no end of sciences at their finger-ends, who have travelled and seen the world; and even among the lower ranks of the profession there is a satisfactory disposition to observe

and reflect, and to avail themselves of every new invention which can be turned to account. From the dulllest and least intelligent, the British farmer promises to become one of the most enterprising, enlightened, and scientific workers in our social hive.

THE MIDNIGHT SUN.

VIGOROUSLY Herr Ostrom plied the whip as we approached the town of Haparanda, and a great clatter the little Swedish horses made as they galloped over the ill-paved streets. The rumbling carriage rattled worse than ever, and the worthy burgher produced the desired effect of bringing everybody to door and window, and causing open-mouthed wonder in the simple peasants. The carriage and its occupants excited so much attention that I followed almost unnoticed in the jingling 'triller.'

Herr Ostrom was a burgher of Stockholm, who, for love of filthy lucre, had demeaned himself so far as to become our courier and interpreter, with an express stipulation, however, that he was 'not to be treated as a servant.' Three days before, we had landed from the Stockholm steamer at Umeå, a village about halfway up the Gulf of Bothnia, where we had taken post-horses, and hurried with all attainable speed northward. Well might we hasten, for we were chasing the sun. We had learned that, on the 21st of June, from Avesaxa, a mountain forty miles north of Torneå, we might behold the god of day taking unto himself supreme rule, and ousting night altogether; in other words, that the sun would remain the whole twenty-four hours above the horizon. We were three days behind time, but hoped still to catch a glimpse of the midnight sun.

Our progress had necessarily been slow, for posting in Sweden is conducted on different principles from that in Central Europe. Certain farm-houses are designated as post-stations, and the neighbouring peasants take turns in supplying travellers with horses. We drive up to a post-house, and if it happens to be a 'fast' station—that is, one where the postmaster is bound to have horses always in readiness—we may hope to get off in an hour, that being the time allowed to produce his animals. The readiness consists in having the horses pastured in some neighbouring fields; and on our arrival, three or four bareheaded boys and girls set off with most encouraging haste in different directions to catch them. But be not too sanguine, my travelling companions; perhaps we are doomed to see the horses—which, to do them justice, however lazy in harness, always exhibit amazing activity when at large—chased from field to field, and, at last cornered, dodging their pursuers, and, with contemptuous elevation of heels, dashing off again at full speed. Whilst impatiently watching these manoeuvres, we are fortunate if the approaching tinkling of bells—the Swedes bell their horses as the Swiss do cows—announces the successful capture of some other herd, which, with much shouting, is triumphantly driven into the yard. The required number is selected; harnessed with much letting out and taking up of straps, for travellers provide their own harness; the postilion—a peasant boy or girl, the representative of the owner of one or more of the cattle—mounts the box beside Ostrom, and he sets off; while I drive the triller, a rude buggy; and we strive to get something more than the regulation speed—four English miles an hour—out of the clumsy brutes. They are all dun-coloured ponies, with a black stripe down the back, and mane and tail enough to provide half a score of civilised horses.

As we go northward, the ponies are smaller; shaggier, and lighter coloured; the cows, too, that we see browsing by the wayside are very small, hornless, and pure white in colour. The trees are stunted, and we traverse vast forests of dwarf pines. There is no night now. The sun pours down upon us for twenty-two hours in the day, scorching us with his oblique rays during the many hours that he but just hovers above the horizon. When he sinks behind the hills, lingeringly, as if dreading to lose sight of us, there is a clear bright twilight. The peasants are stirring at all hours, for they take but little rest in midsummer, literally 'making hay while the sun shines,' and postponing sleep till the long winter nights. We go on, stopping but twice a day to snatch a meal of *lax stake* (broiled salmon) and black Swedish bread. The worthy burgher gets wearied from want of sleep and the toil of urging forward lagging horses. As soon as we reach a post-house, he calls for a glass of brandy and a cup of coffee, and, throwing himself on the floor, falls fast asleep. I pay for the horses, hasten the harnessing of fresh ones, and then wake him with difficulty.

Thus we hurry northward: now plunged in dreary forests; then mounting hills, whence we behold the island-studded sea and the lake-dotted valleys; or crossing noble rivers, whose deep dark waters flow so gently as hardly to swerve the rude ferry-boats from their course—till we reach Haparanda. We are on the northern shore of the gulf. We send on a *forbūd*, or avant-courier, to order horses, and stop to dine luxuriously on a beef-steak. And what a god-send it is! We have been perforce rigid vegetarians since leaving the steamer—always excepting the article of fish, which is only too plentiful; and we find the peasants' diet of sour milk and black bread rather weakening than otherwise.

We here engage an interpreter, for we shall find only Finlanders north of this; and our communications with the natives must hereafter first be framed in French for Ostrom, by him translated into Swedish to Eric, and by Eric into the Finnish tongue.

We proceed along the shores of the Torneå river, all of us travel-wearied. We move on slowly; and, at last giving up all hopes of reaching Mount Avesaxa to-night, fix them instead on a nearer mountain. Twelve o'clock approaches, and we fear we shall not even reach this. The lower edge of the sun touches the horizon. Watching him anxiously, we find he does not descend. 'He will not set,' cries F.; 'we shall see the midnight sun.' We stop the horses, and in profound silence fix our eyes on the great luminary. Now we perceive he moves, but not downwards. A blood-red ball of fire, he seems to roll along the horizon. Majestically he rolls, till an intervening mountain threatens to hide him from our sight; but no—a full third of his disc shines brightly upon us. He keeps on from west to east. All nature is hushed as if in awe. The heavens are cloudless, save where a few light cirri float a few degrees above the sun. In the north, the sky is coloured yellow, clear and brilliant as in a winter's sunset. It is twelve o'clock. We hold our breaths. Still the luminary moves towards the east, rising almost imperceptibly. A bird in the pine-wood bursts into a flood of song. The sun detaches himself from the horizon, and slowly rises into the open heaven. We look around on the lonely landscape. The trees are few, and so low that they seem but shrubs. The frequent hills are destitute of vegetation, and the broad Torneå river winds his way among them. We mark the prospect well, for this is an era in our lives.

We drive on along the banks of the noble river till, at two o'clock, we reach the little village of Matrengi. There is no road north of this. If we wish to pursue our journey, it must be in boats. But we are too fatigued to moralise upon this, the end of civilisation, the 'jumping-off place,' and I gladly throw myself

into one of the little coffin-like boxes which the Finns use for beds, and close my eyes in sleep. O wise Sancho Panza, to invoke a 'blessing on the man who invented sleep!' For seventy-two hours sleepless, with little and poor food, had I been urging forward lagging horses under the burning midsummer sun. My face, blistered with heat, seemed on fire; my lips were parched and bleeding; my inflamed and half-closed eyelids could not protect my eyes from the glare. How gladly I closed them in forgetfulness!

At one o'clock the next day (Sunday) I awoke. The yard was half-full of Finns, who loitered about the inn, after having examined our carriages with the greatest curiosity. They looked upon us as wonders. While I was dressing, a group collected about my door, eagerly staring in when it was opened by the *jungfer* who was arranging breakfast, and frequently pushing it ajar themselves for greater convenience of observation. They are a large athletic people, active and energetic. The men wear queer leather-caps, coarse home-spun clothes, and boots turned up at the toes, and constantly smoke bad tobacco in wooden pipes.

Late in the afternoon, we set out up the river in two boats, each propelled by three men. Herr Bergstrom, the Swedish tax-collector, and the only civilised man in the neighbourhood, kindly accompanied us. The boats are built very light, low in the centre, and high in the bows, and are pushed up the swift stream by poling along the shore. The Torneå is wide and rapid, studded with large islands. The banks are rather high, and covered with bright green grass; for here, though the summer is so short, vegetation is very luxuriant while it lasts. We passed many salmon-fisheries. The fences of poles, stretched across the stream, pushed by the current, and recoiling by their own elasticity, make a low murmuring, as if complaining of being removed from their native element. Our men stopped to rest at the dairy belonging to the postmaster; they gathered round a huge bowl of sour-milk, each armed with a spoon, and soon despatched their frugal meal. Sour-milk, hard rye-biscuit, and fish, are in summer the only food of these sturdy peasants. The little white cows were assembled in a stable, from which the gnats were driven off by the smoke of a peat-fire before the door. They were tended by two strapping rosy-cheeked lasses; and everything from stable to dairy was neat and clean as possible.

Our next stoppage was at the falls in the river, where we left our boat, and, while the men drew the other up along the bank, we walked through the woods. Swarms of mosquitoes and gnats attacked us, and, in spite of handkerchiefs over our heads and waving pine-branches, bit us furiously. We walked two miles, through marshy grounds covered with a profusion of the *Linnea borealis*, and other beautiful wild-flowers of kinds unknown to us, and reached a log-house in a narrow clearing. A pair of reindeer horns were nailed over the door, and a barrel was sunk in the ground to collect the water from a spring. 'This house was built and this clearing made but five years since,' said Herr Bergstrom; 'they are pushing cultivation northward.' Northward it was indeed—north of 67° 30'! We were within the Arctic Circle. In no other country in the world, except in Norway, can cultivation be carried on even many degrees south of this; and here we were surrounded by a forest of green trees, and treading on green grass and lovely flowers. Taking boat again, we ascended the river till the sun sunk very low, when we landed, and scrambled up the high bank to a fine point of view. We saw some wondering peasants regarding us attentively from the door of their hut.

But our attention was soon fixed on the sun, whose lower limb grazed the horizon. Now again a huge fiery ball, he rolled on the mountain-tops, this time not dipping behind them. His edge touched a distant solitary pine; then shewed the bare branches in dark relief against his red disc; then appeared severed by

the scathed trunk; kept onward, and left it behind him without rising or sinking a second. Thus swift and far he passed in right ascension, and not until some minutes past twelve did he alter his declination, and, shaking off his contact with the earth, seek again the zenith.

Keeping to the centre of the stream, we now rowed swiftly downwards. We had fishing-hooks—long lines with large hooks, baited with a piece of bright tin and a bit of red worsted. This was so made that, as it towed far behind the boat, it shimmered in the water, looking not unlike a minnow. Three large fish were caught during the descent. Our progress was rapid, and we soon reached the bend of the cataract. Herr Bergstrom asked if I would descend the falls with him. I could hardly believe he would attempt such a thing, but finding him serious, and that it was not unusual, I assented. A man was obtained who makes it his business to steer boats down the falls (for it would be certain destruction to attempt it without an experienced pilot), and with two rowers we set off.

The rowers pulled lustily, to give steerage-way to the boat; the grizzly old steersman, his long white hair streaming in the wind, seized firmly his broad paddle; the men talked and joked in the uncouth Finnish tongue; the rapid stream hurried us along; while I sat quietly wondering, like the sailor when his ship was struck by lightning, 'what the dickens was coming next.' Soon the roar of the cataract drowned all other sounds; the water was here a surging mass of foam, and there showed through its yellow waves the rocks with which it warred. The boat shot down the first steep descent like lightning; then rocked and rose, and felt like a ship in a stormy sea; then was struck by a high wave, and trembled with the shock; then leaped downwards, as if to plunge beneath the stream, dashing the foam of the next wave far and near from her high prow. Still rushing down the torrent, the thunder of the falls in front directed our attention to a huge rock, the waters hurling themselves against it, and mounting over its very top. The pilot gave the boat a sheer, and before we knew how or why, we had left it far behind. The water was splashing into the skiff as we took an oblique course. All was noise and confusion around us; the waters bellowed and the shores seemed hurrying away. Another roar warned us of another rock. The boat reared like an impatient charger, plunged downwards, and again shot by, giving us hardly time to glance at it as we passed. She leaped over the last wave, sped through the swift rapid below the fall, and safely grounded on the shore. It was a most exciting passage, and I had plenty of leisure to meditate upon it while the men were baling out the half-filled boat, and the rest of the party were accomplishing their slow overland passage.

We rowed down-stream to a salmon-fishery, and sent a boatman ashore to waken the fishermen.

With a loud halloo, six young men and three girls rushed out helter-skelter from the rude hut, donning their clothes as they ran, and sprang shouting and laughing into their boats. The foremost girl, a strapping red-haired maiden, seized the oars of the first boat, into which three men had sprang, and pulled it into the stream before the others had tumbled into their boats. A fence of upright poles, driven into the bottom like stakes, stretches entirely across the river, with a square enclosure fenced off at the centre. This has openings at the sides, which the salmon enter on finding their progress up the river stopped at every other point, but discover too late that they are in a *cul-de-sac*, and wander about seeking the exit.

The boats, propelled at such speed as to throw jet at stem and leave foam astern, entered the enclosure, and the rowers, dropping their oars, and pulling the boats along by the fence, payed out the nets along the four sides. Then all three boats' crews seized the upper net, one at the centre, and one at each end, and

pulled it downwards, one person in each boat constantly darting a pole into the water and catching it again as it rose, to frighten the fish, and prevent their springing over the top of the net. They soon brought the upper net side by side with the lower one, and then, still thrashing the water with the pole, to keep the poor fish frightened and bewildered, hauled up the two nets together with three huge salmon entangled in the meshes. These were killed by blows of a club on the head, to prevent their jumping out of the boat. Again with great shouting the fishers dashed around the enclosure, the men pulling, while the half-wild girls threw overboard the nets as fast as their arms could move. They threw them down, pulled them in, took this time but one fish, lay on their oars a moment to look at us, and then, calling to one another, they darted off again across the stream. Such powerful energetic girls I never saw before; and indeed, the whole people in activity and alertness contrast agreeably with the lazy stolid peasants of Germany.

We reached Matarenzi at ten o'clock, and retired to sleep during the noonday heat.

Towards six o'clock I rose, and set off with the burgher to visit Herr Bergstrom. He has a pleasant place on the river, and three or four little red houses built in a quadrangle, after the Swedish fashion. His wife came in to welcome us, and brought a bottle of punch, which we drank with many bows and flourishes, the host always insisting on our emptying our cups at a draught, then refilling and clinking glasses. The room was plainly furnished, but, of course, scrupulously neat. There was the usual rack in the corner for pipes; among these was a pipe-bowl of great size, made of a knot of a wood resembling maple. It was a hundred years old, and had last belonged to the *papa*, or parish clergyman. With Madame Bergstrom and her son, Johann Eric, a little boy of four years old, we set off for an excursion to Mount Avesaxa.

The ascent was in some places steep and rocky, but the mountain was not high, and even the *gosso* (Anglicè, small boy) got up without much fatigue. A barrel elevated on a pole marked the summit. It was here that some scientific measurements, having reference to the figure of the earth, were made by Maupertius and other French astronomers in 1736. The top of the mountain was destitute of vegetation, like every hill-top in that latitude, and the surrounding elevations were so low that Avesaxa, though by no means a high mountain, overtopped them all.

On one side flowed the broad Torneå. Far to the north, within the Arctic Circle, rose pyramidal mountains, behind which the sun, now low down, seemed about to sink. On the eastern and precipitous side, was a pretty lake, with an outlet encircling Mount Avesaxa, and joining the river. In every direction rose low hills, their bases covered with dwarf pines. Our enjoyment of the view was so lessened by the increasing swarms of mosquitoes, that we gladly took refuge in the smoke of a huge fire kindled by our boatmen.

Between admiring the prospect, brushing off mosquitoes and taking asylum in the smoke, and making absurd attempts at conversation in bad Swedish, we passed the time till near midnight.

And now the winged horses of the sun, that had long hovered over the mountains, just grazed their summits, and slowly drew their chariot along the horizon. They spurned with their heels the dark pinewoods till past twelve. Then the fiery car was half-buried, axle-deep, behind an intervening peak. They dashed forth, poised themselves for a moment, and, then springing from this dark earth, began anew to climb high heaven. The rising sun was the signal for another little supper; and then, reversing the sun's course, we commenced our descent. That same day we began our journey southward, and were glad to welcome night again in lower latitudes. Sleep

is a blessing, and darkness begets sleep; but still it will be pleasant around a winter evening's fireside to recall to mind our three days' visit to the arctic zone and the thrice-seen midnight sun.

ALEXANDER THE CORRECTOR.

THE biblical student, turning over the pages of his Concordance, finds it hard to believe that such a compilation, necessitating years of arduous labour and patient application, was the work of a lunatic; yet such is the fact. Alexander Cruden was more or less mad throughout a long life, the history of which is worth studying, as a strange case of life-long brain-weakness, as well as a curiosity of literature.

Alexander Cruden was born in 1701—his father being at that time one of the bailies of Aberdeen—and in due course, he commenced his education at the grammar-school there. At a very early age, he seems to have become possessed with the idea that he was destined to be a shining light to his generation, and a chosen instrument 'in luring men from the error of their ways. As a natural consequence, he fell in readily with his father's desire that he should embrace the ministry as his profession, and to that end entered the Marischal College, where he was known as an earnest student, likely to prove a credit to his alma mater, and an ornament of the church. Unfortunately for the fulfilment of these pleasant anticipations, Cruden fell in love with a clergyman's daughter, who, unable to appreciate his merit, turned a deaf ear to his pleading, and prevailed upon her father, who was not unfriendly to his suit, to shut his door upon her persevering lover. Thwarted passion warmed the dormant seeds of insanity into life; he not only neglected his studies, but his language became so incoherent, and his actions so strange, that his relations were reluctantly compelled, for his own sake, to place him under medical supervision.

Temporary seclusion, combined with judicious treatment, worked the hoped-for effect upon the patient. Meanwhile, the cause of his malady had proved herself quite unworthy of the affection of an honest man, and had been sent away from home in disgrace. Aberdeen became distasteful to Cruden as the scene of his suffering. Giving up his once cherished hope of attaining distinction in the pulpit, he set out for London, where he obtained employment as a private tutor. This was in 1722. Ten years afterwards, he entered into business as a bookseller in the Royal Exchange, adding to his income by correcting proofs for the press. One day, a friend, anxious to do him a service, proposed to introduce him to a merchant living in the neighbourhood, who was likely to prove a good customer. He went accordingly to the merchant's house, and strangely enough the door was opened to them by Cruden's frail lady-love. Starting back in dismay, he exclaimed: 'Ah, she has still her beautiful black eyes!' descended the steps in haste, and could never be induced to approach the house again.

Soon after this romantic incident, Cruden commenced a work he had long meditated; and after fourteen years' devotion to his task, had the gratification of presenting Queen Caroline with a copy of *A Complete Concordance to the Holy Scriptures of the Old and New Testament*. Her majesty 'smiled upon the author, and said she was mightily obliged to him; and he left the royal presence, confident that these kind words would be followed by a more substantial mark of approbation. The very next week the queen was taken ill, and died before she could realize the hopes her smile had raised. To render his disappointment more bitter, his business, in consequence of his application to the Concordance, had fallen off to such an extent, that he was glad to dispose of his stock in trade, and shut up his shop.

Deprived of his daily occupation, and worried by 'the eternal want of pence,' his mind became unhinged; and a second matrimonial disappointment had its share in bringing a relapse of insanity. He had been in the habit of reading prayers every Sunday evening at the house of Mr Payne, a corn-chandler in Piccadilly. This gentleman dying in the autumn of 1737, left his widow well provided with worldly gear. As soon as a decent time had elapsed, Cruden began to pay court to the lady, and she, according to his own account, gave him every encouragement, his addresses being 'received cheerfully and pleasantly without the least contradiction.' Soon after, however, he saw reason to suspect the widow's sincerity, and to make assurance doubly sure, wrote to say he would call at a certain time for a plain answer. When he went to keep his appointment, the lady left the house without deigning to speak to him at all. This treatment had such an effect upon poor Cruden, that his friends found it necessary once more to put him under constraint. He was taken to a private asylum at Bethnal Green, kept by a Mr Wightman, 'who pretended to know that a person is mad by the tone of his voice.' We are inclined to believe he was not so very mad after all, for while in duration vile, he contrived to keep a diary, in which he recorded the treatment he received day after day. It was severe enough, according to our modern notions. He was blooded, arrayed in a strait-waistcoat, handcuffed, chained by his leg to the chimney during the day, and fastened to his bedstead in the same manner by night. After a time, when he became possessed of a few shillings, through the benevolence of some visitors, he bought the privilege of walking in the garden for a few hours every day. All this Cruden bore pretty patiently, if not uncomplainingly, but hearing that it was determined to remove him to Bethlehem Hospital, he resolved to make an attempt to regain his liberty.

To effect this desired consummation was no easy matter, under the circumstances; however, he commenced operations at once, by setting to work at cutting through his bedpost with his dinner-knife. 'Working hard and praying hard' for three days, he succeeded, without awaking any suspicion of his intentions; and early on the morning of the 31st of May, which happened to be his birthday, he dropped out of window, and with the chain round his leg, gained the open street, and made his way towards Mile End, the stones making sad work with his slipperless left foot. Upon reaching Whitechapel, he was stopped by the watchmen, and taken to Aldgate watch-house, on suspicion of being a runaway jail-bird. He told his story. The constable sent to Bethnal Green to ascertain how far it was true, and Cruden's hated keepers soon arrived to claim him. The parochial officer, however, refused to give him up until all parties had been before the lord mayor, and to Guildhall they went. After hearing both sides, Sir John Barnard refused to deliver Cruden up to Wightman's agents, and recommended him to a lodging-house keeper in Downing Street. Here he remained unmolested, working hard for the printers, until he took it into his head to set up as a corrector of public manners, 'much affected by the many sins committed on the public streets of London, particularly by the crying sin of profane oaths.' Unhappily, he was not content with using persuasion only, but suffered his hatred of swearing to overcome his love of peace. One afternoon, as he was passing along Fleet Street, his ears were shocked by a succession of oaths from the mouth of a workman; carried away by his indignation at such a profanity, he snatched a shovel, which the offender was carrying, and 'corrected him with some severity.' This naturally attracted a crowd, and a general mêlée ensued, which lasted about an hour, during which our reformer

gave and received several hard blows, till, finding he was getting the worst of the fight, he retired to his lodgings. Although he says nothing about it, he seems to have been pursued home by some of the combatants; for greatly to his indignation, his 'conceited landlord and hot-headed landlady,' not only thought it necessary to get two watchmen to guard his chamber-door through the night, but sent for his sister Isabella. While she was talking to him at his bedside, one Acott, 'perhaps as conceited a tailor as any between Hyde Park Corner and Limehouse,' came into the room and bound his hands with list. He was then taken to an asylum at Chelsea, but was again set free after a rigorous incarceration of seventeen days. Upon being released, he refused to forgive his sister for her part in the affair, unless she consented to undergo forty-eight hours' confinement in prison (giving her the choice of Newgate, Aylesbury, Reading, or Windsor), which would give her an opportunity 'for a little speculation and meditation, and convince her that she is fallible;' otherwise he would punish her for her impenetrability and obstinacy by commencing legal proceedings. The lady being deaf to the appeal, Cruden was as good as his word, and brought an action against her and three others, laying the damages at ten thousand pounds. It was tried in February 1754, and decided in favour of the defendants. This he attributed to the desertion of his counsel, or, as he expressed it, to 'Alexander's generals not doing their duty;' and appealed to the public for a reversal of the judgment, in a pamphlet dedicated to the king.

In this pamphlet he published certain prophecies, made, as he averred, by a trio of eminent clergymen, though he discreetly veiled the names of the seers. These predictions were to the effect that he was destined to become a 'second Joseph,' and the Corrector of the people's manners and customs, besides attaining the more worldly honours of knighthood, united to the mayoralty and representation of the metropolis. His first step was to write a pamphlet setting forth his claims to a title. In this curious production he says: 'The designs of Providence in relation to the Corrector are yet somewhat mysterious, but are thought to be of very great importance to his majesty and his people.' He declares that his especial motive for seeking the honour, is in order that the prophecy that he was to be the member for the city should be fulfilled; but 'if his brother-liverymen make no objections, the honour of knighthood may perhaps come afterwards.'

To bring his book under the king's notice, he lay in wait for Lord Poulet, one of the bedchamber lords, who received him civilly, because, as Cruden quaintly confesses, 'being goutish in his feet, he could not run away from the Corrector as others were apt to do.' Lord Poulet, however, declined to present the pamphlet, on the plea that he could not understand it, a candid avowal at which the author naturally waxed wroth. Nothing daunted, the self-styled Corrector wrote a letter to his majesty, enclosed a copy of his book, and prevailed upon a page of the backstairs to convey it to its destination. Almost every member of the royal family and the episcopal bench were the puzzled recipients of the *Plea*. Having ascertained that the fees payable upon receiving his desired dignity amounted to L.95, ls. 6d., our knight, in anticipation, always carried a hundred-pound note about with him in readiness. He became known and shunned by every one whose position at court was likely to enable them to further his purpose, until his experience justified him in inveighing in strong terms against the fashion of servants saying their masters were not at home when the contrary was in reality the case. At last he applied to Lord Holderness, who referred him to the Treasury, and the Treasury directed him to apply to the Lord Chancellor while parliament was sitting. Cruden, however, had no faith in anything but royalty itself, and danced

attendance at levee after levee, in the hope that King George would speak to him on the subject. Still nothing came of it, and the election for London drew nigh; he resolved to stand the hazard of the die as an untitled candidate, and astonished the good citizens by issuing the following extraordinary election address:

'TO THE LIVERYMEN OF THE CITY OF LONDON—I have acquainted the sheriff of my humbly proposing to be a candidate for one of the representatives in parliament of the city of London, which may be looked upon as an extraordinary step. This is not denied; but I trust I am under the direction of a gracious Providence, and I desire to be entirely resigned to the will of God, the supreme Disposer of all things. . . . If there is just ground to hope that God will be pleased to make the Corrector an instrument to reform the nation, and particularly to promote the reformation, the peace, and prosperity of this great city, and to bring its inhabitants to a more religious temper and conduct, no good man in such an extraordinary case will deny the Corrector his vote; and the Corrector's election may be a means to pave the way to his being a Joseph and a useful and prosperous man,' &c. &c.

As might have been expected, the choice, even by show of hands, did not fall upon the Corrector; and as he declined to demand a poll, 'having conscientious objections to that mode of election,' his ambitious hope remained unrealised.

Tired of law, and disgusted with politics, Cruden now betook himself to perfecting his beloved Concordance within doors, and occupying himself out of doors by erasing 'Wilkes' and 'No. 45' from the public walls with a piece of wet sponge, which he was in the habit of carrying with him, to remove any offensive inscriptions chalked for those who ran to read.

After failing to reform the manners of the people at Oxford, and narrowly escaping personal chastisement in the attempt, the Corrector paid a visit to Aberdeen, and unmindful of the proverbial truth of the fate of a prophet in his own country, tried to convince his fellow-townsmen that he was born to regenerate the world. The result may be guessed. He soon grew tired of his birthplace, and returned to the metropolis. He took lodgings in Islington; and there, on the 1st of November 1770, this pious, harmless enthusiast was found dead in the attitude of prayer.

PARTING WORDS.

'GOOD-BYE!' how oft we use the homely phrase,
Perchance with heavy heart, and tearful-eyed,
Or with a smile, by trembling lips belied,
Which own the sorrow that the smile gainsays;
Yet think we not how much the word conveys
A whole religion by our tongue implied,
A Faith in God, by the faint heart denied,
Which in our sorrow, murmurs at His ways.
'Good-bye!' can any parting words express
A firmer trust, a deeper tenderness?
God with thee—all is well, our anxious fears
Are but a mockery of the care we implore;
Trusting His love, we sanctify our tears.
God be with thee, Beloved, now and for evermore!

F. F.

The Editor of *Chambers's Journal* has to request that all communications be addressed to 47 Paternoster Row, London, and that they further be accompanied by postage stamps, as the return of rejected Contributions cannot otherwise be guaranteed. All MSS. for publication should be written on one side of the page only. It would also be well if each correspondent gave his or her address as it should be posted.

Printed and Published by W. & R. CHAMBERS, 47 Paternoster Row, LONDON, and 359 High Street, EDINBURGH. Also sold by all Booksellers.